

Supplemental Figures

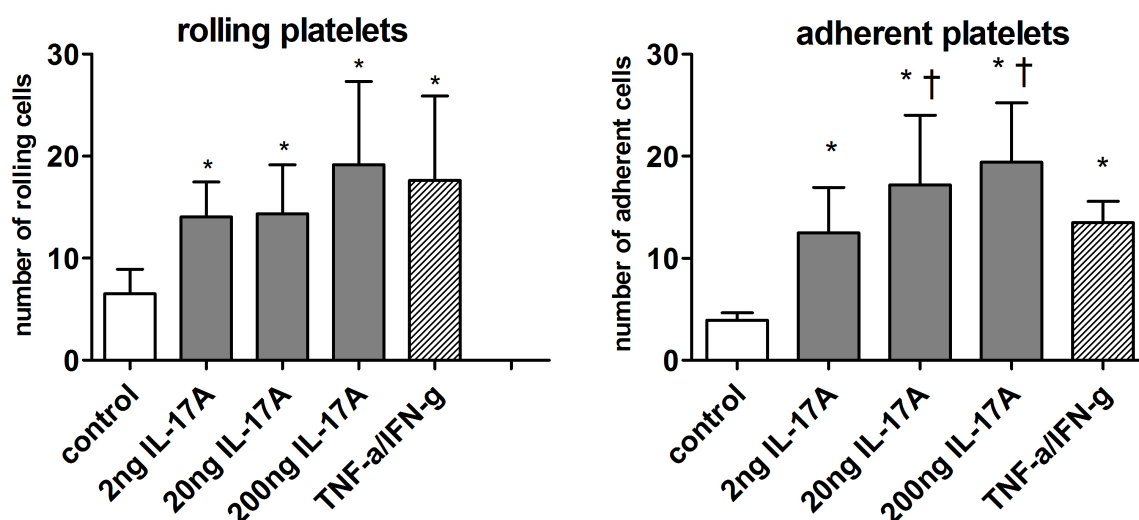


Figure S1. Effects of IL-17A on platelet rolling and adhesion.

Coverslips were pre-coated with gelatin and HUVECs were cultured till confluency as described in the methods section. Endothelial cells were subsequently stimulated with different concentrations of IL-17A or with the cytokines TNF- α /IFN- γ . Resuspended platelets were perfused over these coverslips. Rolling and firm adhesion of platelets over HUVECs under high shear stress; (A+B) mean \pm SD of 5 independent flow chamber experiments, (A) * vs unstimulated HUVECs $p < 0.05$; (B), \dagger vs. TNF- α /IFN- γ $p < 0.05$. Data are given as mean \pm SEM of 9 independent static adhesion assay experiments.

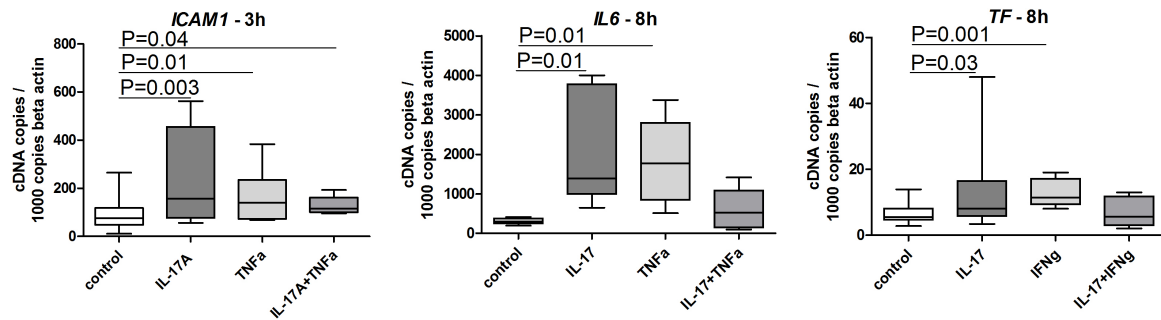


Figure S2. No additive effects of IL-17A in addition to IFN- γ and TNF- α in the plaque microenvironment

By incubating plaque pieces with IFN- γ and TNF- α , both cytokines induced a significant upregulation of various molecules. TNF- α significantly increased the expression of ICAM1 and CCL2 after 3h and 8h as well as TF after 3h and IL6 after 8h ($P < 0.05$ respectively, ICAM1 and CCL2 - supplements - Figure S3, others data not shown). IFN- γ significantly increased MMP9, ICAM1 and TF expression levels after 8h as well as TNF- α after 3h and 8h ($P < 0.05$ respectively, TF – supplements – Figure S3, others not shown). But there was no additive effect of IL-17A with IFN- γ and TNF- α . Thus, the data underline the impact of IL-17A as a pro-atherogenic mediator independent of other important pro-atherogenic cytokines such as IFN- γ and TNF- α in murine as well as probably also in human atherosclerotic lesions. Results are shown as box plots displaying mean and 25th and 75th percentiles as boxes and 10th and 90th percentiles as whiskers.